REMARKS

Applicants respectfully request further examination and reconsideration in view of the amended claims and the arguments set forth fully below. In the final Office Action mailed November 19, 2009, claims 1-39 have been rejected. In response, the Applicants have amended claims 1 and 18, and have submitted the following remarks. Favorable reconsideration is respectfully requested in view of the amended claims and the remarks set forth fully below.

Rejections Under 35 U.S.C. §103

Claims 1-39 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,122,664 to Boukobza et al. (hereinafter Boukobza), in view of U.S. Pregrant Pub. No. 2003/0023459 to Shipon (hereinafter Shipon). The Applicants respectfully disagree with this rejection.

Independent claims 1 and 18 of the present application specifically call out a proactive notification agent that proactively monitors an entire healthcare information system by its ability to communicate with any of a plurality of system modules. The proactive notification agent as described in claim performs the polling, transforming, monitoring, comparing and notifying steps as set forth in the independent claim 1 and is the only notification agent claimed in the system claims set forth in the independent claim 18.

In order to refocus the discussion herein between the undersigned and the Examiner, I propose to concentrate on the differences between the claimed proactive notification agent of the system and method of the present application, and the autonomous agents (SAA) of the Boukobza reference. **The Applicants respectfully submit that the underlying argument is that even if combined, the Boukobza and Shipon references would include an SAA that is incapable and unable to exist singularly in the hospital information system, as such an SAA cannot communicate with any of the modules of the hospital information system.**

The Applicants respectfully submit that the single proactive notification agent of the present application is structurally and functionally different than those agents found in the Boukobza reference. As stated in the previous Office Action response, the proactive notification agent of the present application is a single agent included in the customer healthcare information

system that is capable of monitoring a plurality of object types of a plurality of nodes [Abstract]. This proactive notification agent is diverse enough to interface with a plurality of specific modules specific to the different object types or to a particular domain, each specific module measuring static and dynamic parameters particular to the object type monitors and collecting said measurements, testing conditions on said parameters relative to predefined thresholds and possibly triggering actions associated with said tested conditions [Abstract]. Therefore, while the Boukobza reference includes agents configured in each of the nodes for communicating with a management node specifically for that node, the system and method of the present application includes a single proactive notification agent in the healthcare information system, that is capable of communicating with all nodes, regardless of object type, and regardless of protocol, format, etc.

In Boukobza, autonomous agents (SAA) are installed in each node (N1, N2...N_n), and each of these agents are configured to monitor its assigned node, to process the object types or domains in each of these nodes locally, or to feed back the information collected in each of these nodes to a graphical interface of a management node (MN) [Boukobza, Abstract]. Referring further to the Boukobza reference, the autonomous agents make "...impossible to assure...to measure specific parameters of each application, to test conditions on these parameters relative to the thresholds, and then to execute an action in order to warn of a problem, to reconfigure or to correct," [Boukobza, column 2, lines 39-65].

Furthermore, the autonomous agent SAA is "chiefly composed of a Generic Agent related to Specific Modules (SM1, SM2, ...,SMn), each of which is specific to an object type of to a particular domain, and of files, one of which is intended to contain the Basic Functions used," [Boukobza, column 4, lines 36 through column 5, line 18]. It is clear from these few citations that the autonomous agents SAA are inadequate, and further unable to function as the proactive notification agent of the present application, as these autonomous agents SAA cannot communicate with all of the modules of the system, but only with its Specific Module, "...each of which is specific to an object type of to a particular domain, ...".

As follows in Boukobza, each node is specific to each object type of that particular node, and therefore requires an autonomous agent. Accordingly, Boukobza does not

teach the polling step, the notifying step, nor the monitoring step of the independent claim 1, nor these corresponding elements in the independent claim 18.

Once again, even if Boukobza and Shipon were combined, the autonomous agents of Boukobza would be unable to function as proactive notification agents, and therefore the system created by the combination of Boukobza and Shipon would fail, and not ultimately be the system of the present application. Once again, the autonomous agents of Boukobza cannot communicate with all of the modules of the hospital information system, and therefore a SAA cannot serve as a proactive notification agent. Accordingly, neither Boukobza, Shipon, nor their combination teach a proactive notification agent.

Further belaboring the analogy of the two-piece hammer handle of the 1961 *In re Wolfe* case, as cited by the Examiner, the Applicants respectfully request that the Examiner is missing the issue by likening the number of agents to the number of handle pieces. In the *Wolfe* case, the only difference between the one-piece hammer handle and the two-piece hammer handle is the number of pieces. The one-piece hammer handle provides no additional advantage or function, and more importantly, replacing the one-piece hammer handle with a two-piece hammer handle would still allow the user to actually use the hammer. **In the present case, using an autonomous agent for a proactive notification agent would not allow the user to enjoy the benefits of the system and method of the present application.**

Lastly, within the Office Action it is stated that Boukobza does not teach a healthcare information system. The Office Action relies on the Shipon reference to teach this element, but this assessment of the Shipon reference is inaccurate. Regardless of whether either reference teaches an HIS, the differences cited above illustrate that this combination of references does not teach nor make obvious the system and method of the present application.

Claim 1 is directed to a method for proactively monitoring a healthcare information system, the method comprising configuring a memory device in the healthcare information system, the memory device including a set of executable code, and executing the set of executable code with a processor configured in the healthcare information system, such that when the code is executed, the following steps are performed with a proactive notification agent in the healthcare information system, wherein the proactive notification agent communicates with any of a plurality of system modules: polling a set of data from the healthcare information

system, transforming the set of data into a plurality of counters, monitoring one or more performance parameters of the healthcare information system by recording the values of the parameters by one of the plurality of counters, comparing the value of the counters to thresholds, and notifying a designated representative of the value of one of the plurality of counters exceeding one of the thresholds. As discussed above, neither Boukobza, Shipon, nor their combination teach pulling a set of data from a healthcare information system with a single agent, nor transforming the set of data into a plurality of counters in the HIS. For at least these reasons, the independent claim 1 is allowable over the teachings of Boukobza, Shipon and their combination.

Claim 18 is directed to a system for proactively monitoring a healthcare information system, the system comprising a memory device configured in the healthcare information system, the memory device including a set of executable code, a processor configured in the healthcare information system configured to execute the code, thereby effectuating the function of the following modules: a notification agent, wherein the notification agent polls a set of data from the healthcare information system, wherein the proactive notification agent communicates with any of a plurality of system modules, and a plurality of counters, each of which monitor one of a multiplicity of performance parameters by recording the values of the one parameter, wherein the agent further notifies a designated representative of the value of one of said plurality of counters exceeding a threshold. As discussed above with respect to the independent claim 1, neither Boukobza, Shipon, nor their combination teach a single notification agent configured to pull a set of data from the hospital information system nor a plurality of counters produced when the agent transforms the set of data. Accordingly, the independent claim 18 is allowable over the teachings of Boukobza, Shipon and their combination.
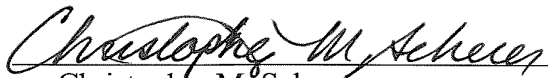
Claims 2-17 and 19-39 are dependent upon the independent claims 1 and 18. As discussed above, the independent claims 1 and 18 are allowable over the teachings of Boukobza, Shipon, and their combination. Accordingly, claims 2-17 and 19-39 are also allowable as being dependent upon an allowable base claim.

For these reasons, Applicants respectfully submit that all of the claims are now in a condition for allowance, and allowance at an early date would be appreciated. Should the Examiner have any questions or comments, they are encouraged to call the undersigned at 414-271-7590 to discuss the same so that any outstanding issues can be expeditiously resolved.

Respectfully submitted,

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